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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/415,920	10/12/1999	TOSHIHIRO NAGOSHI	5905.0035-01	5458

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EXAMINER

YANG, RYAN R

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 05/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/415,920

Applicant(s)

NAGOSHI ET AL.

Examiner

Ryan R Yang

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15,17-23 and 28-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 15,17,18,20-22,28,35,36 and 38 is/are rejected.
- 7) ☒ Claim(s) 19,23,29-34,37 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Amendment, filed on 3/18/2003.

This action is final.

2. Claims 15, 17-23 and 28-38 are pending in this application. Claims 15, 28 and 38 are independent claims. In the Amendment, filed on 3/18/2003, claims 15, 17-21 and 23 were amended, claims 16 were canceled, and claims 28-38 were added.

3. This application is a divisional application of application No. 09/975,966 dated 11/21/1997.

This application claims foreign priority dated 11/22/1996.

4. The present title of the invention is "Game device, picture data forming method and medium" as filed originally.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 15, 17-18, 22 and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Fukuda et al. (US 6,329,991).

As per claim 15, Fukuda et al., hereinafter Fukuda, discloses a game device for displaying, as a picture, an object moving in accordance with developments of a game, said game device comprising:

means for reading a present position of said object (Figure 3 105 "for detecting a contact position of the trace input pen 13 and inputting image data comprising a trace written by the pen as coordinate dot train", column 2, line 38-42); and

trace mark drawing means for drawing a trace mark in length within a predetermined range from said present position according to a movement of said object (Figure 3 13), said trace mark having a plurality of portions (Figure 5) and for extinguishing said trace mark from a rear section of each portion by making said rear section of each portion light in color with lapse of time ("brightness, which is one display attribute of the trace 21 which has already been drawn, is changed to a lower value", column 2, line 53-55).

7. As per claim 17, Fukuda demonstrated all the elements as applied to the rejected dependent claim 15, supra, and further discloses a trace pattern assign to said plurality of portions is previously stored as a pattern having different density in storage means

Art Unit: 2672

(Figure 6 48 where the attributes of the traces are updated, so when the new trace is drawn the updated traces are previously stored pattern).

8. As per claim 18, Fukuda demonstrated all the elements as applied to the rejected independent claim 15, supra, and further discloses said trace pattern assigned to said plurality of portions is obtained by changing the transparency of a basic trace pattern (Figure 7 54).

9. As per claim 22, Fukuda demonstrated all the elements as applied to the rejected independent claim 15, supra, and further discloses said trace mark drawing means deletes the drawn trace mark when said object stops and a predetermined time has passed (Figure 7 55 where Q is a function of time).

10. As per claim 38, Fukuda discloses a method of forming picture data for a game device for displaying, as a picture, an object moving in accordance with developments of a game, said method comprising:

reading a present position of said object (Figure 3 105 “for detecting a contact position of the trace input pen 13 and inputting image data comprising a trace written by the pen as coordinate dot train”, column 2, line 38-42); and

drawing a trace mark in length within a predetermined range from said present position according to the movements of said object (Figure 3 13), said trace mark having a plurality of portions (Figure 5); and

extinguishing said trace mark from a rear section of each portion by making said rear section of each portion lighter in color with lapse of time (“brightness, which is one

display attribute of the trace 21 which has already been drawn, is changed to a lower value", column 2, line 53-55).

Claim Rejections - 35 USC § 103

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

12. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. and further in view of Willan (EP 0367405).

As per claims 20 and 21, Fukuda demonstrated all the elements as applied to the rejected claims 15, 17, or 18, supra.

Fukuda teaches generating trace mark that fades in time. It is noted that Fukuda does not explicitly teach "said trace mark drawing means adjusts a timing to extinguish the drawn trace according to a moving speed of said object", however, this is known in the art as taught by Willan. Willan teaches a graphics input system in which the "shape, width, density, texture and colour of the resultant visual effect" were determined due to velocity, acceleration or higher derivatives (column 1, line 45- column 2, line 3).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporated the teaching of Willan into Fukada because Fukada teaches a fading trace mark and Willan teaches the trace could be affected by the drawing speed in order to make the trace visually more effective (column 2, line 3).

13. Claims 28, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. and further in view of Gengler et al. (5,260,695).

As per claim 28, Fukuda discloses a game device for displaying, as a picture, an object moving in a virtual space in accordance with developments of a game, said game device comprising:

processing (Figure 3 104) and displaying means (Figure 3 106) for processing and displaying a trace mark according to movements of said object during the processing of said game, and a past trace mark (Figure 5).

Fukuda teaches generating trace mark that fades in time. It is noted that Fukuda does not explicitly teach "first storage means for storing said trace mark after said game ends; and read out means for reading from said first storage means said trace mark that is stored in the first storage means before a beginning of said game and for providing said trace mark as said past trace mark to said processing and displaying means", however, this is known in the art as taught by Gengler et al., hereinafter Gengler. Gengler discloses an image fader system in which fading images are stored and displayed (Figure 2 202).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Gengler into Fukuda because Fukuda discloses a method of generating trace mark that fades in time and Gengler discloses the fading images can be stored and re-displayed in order to improve its processing speed.

14. As per claim 35, Fukuda and Gengler demonstrated all the elements as applied to the rejection of independent claim 28, supra, Fukuda and further discloses said processing and display means comprises:

means for reading a present position of said object (Figure 3 105); and
trace mark drawing means for drawing the trace mark in length within a
predetermined range from the present position (Figure 3 13) and for extinguishing a
bottom position of said trace mark by making it gradually lighter in color with a lapse of
time ("brightness, which is one display attribute of the trace 21 which has already been
drawn, is changed to a lower value", column 2, line 53-55).

15. As per claim 36, Fukuda and Gengler demonstrated all the elements as applied
to the rejection of independent claims 15, 17-18 or 28, supra, and Fukuda further
discloses a medium with a program stored thereon, the program for making a computer
system function as a game device according to any one of claims 15, 17-18, or 28-35
(Figure 3 102).

Allowable Subject Matter

16. Claims 19, 23, 29-34 and 37 are objected to as being dependent upon a rejected
base claim, but would be allowable if rewritten in independent form including all of the
limitations of the base claim and any intervening claims.

Response to Arguments

17. Applicant's arguments filed 3/18/2003 have been fully considered but they are
not persuasive.

Applicant argues Fukuda's teaching is to change the appearance of the entire trace, not a plurality of traces. After reviewing Figure 9, the Examiner finds a plurality of traces is displayed; the plurality of traces also qualifies as a plurality of portions.

18. The Examiner corrected the 102(b) rejection to 102(e) due to typographical error.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

20. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Inquiries

Art Unit: 2672

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ryan Yang** whose telephone number is **(703) 308-6133**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Michael Razavi**, can be reached at **(703) 305-4713**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 305-47000377.

Ryan Yang
April 25, 2003



MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600